



Ø BEAT



COLO. SPRINGS,
COLORADO

JULY 1982

Field Day Activities Net Fun, Sun & 1800 QSO's

FIELD DAY 1982

June 25, 26 and 27 were filled with ham radio for those people who visited the PPRAA Field Day site off the Rampart Range Road above Colorado Springs. A group of people went up on Friday to start getting organized, and got a little wet when a thunderstorm moved over the area. The main force arrived Saturday, and when it was all said and done, four stations were operating, spread out over quite an area.

CW, HF phone, novice and VHF all had beams and wires, with rigs running starting at about 2:30 p.m. The CW station did their logging and duping on an HP computer (after a program glitch was corrected), the novices were running an Icom 730, HF phone on a Kenwood 820, and VHF was ready for both 6 and 2 meters.

After the rain Friday night, the weather cooperated beautifully, with sun both days, and good temperatures, compared to some Field Days of the past.

The QSO totals run something like this: CW 699, HF phone 512, novice 168, VHF 18, and a second HF phone during VHF off hours got 442. A message was sent to our SCM for bonus points, we got 13 solar QSO's off a Kaman Sciences solar panel, and publicity was covered by KOAA TV with a nice piece on the 5 o'clock news Sunday.

Sunday morning breakfast was excellent with about 30 of us taking part in the feast prepared by many of the hams and Jake NØCYR. The beer pancakes, eggs, sausage and coffee really did make a beautiful morning all the better.

Field Day really is a time for all of us to get out and enjoy ourselves in the woods, operate a little radio, shoot the bull, scout out the forest, and in general have a

good time. It is hoped that everyone who participated had an enjoyable experience, and that any problems or concerns that came up have been taken care of, so we can look forward to Field Day 1983.

There were a few video cameras up there, so maybe those of you who didn't go can get a chance to see what went on. It just might get you fired up for the future.

STANDING WAVE RATIO

Standing Wave Ratios — there are two kinds. The standing wave ratio is a direct measure of the ratio between two impedances; i.e. an SWR of 3 to 1 tells us that one impedance is three times the other. Therefore, the unknown impedance can be either three times as large or three times as small as the known. If the desired impedance that the Transceiver wants to see is 50 ohms, an SWR of 3 to 1 on the line may mean a load impedance of either 150 ohms or one of 17 ohms. If it is 150 ohms, the transmitter will act differently than if it is 17 ohms. In the first case, the power demanded from the power supply will be much lower, and will not be large enough to trip the power supply breaker. In the second case, even though the SWR reads the same, the supply may repeatedly trip out. The SWR gives no indication of reactive components, nor can it separate the resistive from the reactive components. It is calibrated with a pure resistive load and therefore has its greatest accuracy with pure resistive loads. The SWR bridge should be used only as an indicator when attempting to adjust antenna systems to a pure 50 ohm resistive impedance at the transmitter output point.

The above from the TEN-TEC Owner's Manual

Karl White — K4DQ

P.P.R.A.A. DIRECTORS

PRESIDENT	Al Bailey ADØZ 2715 Alteza Ln. 80917	597-8514
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Board Member	*Mark Richardson KAOJXW 24 N. Union 80909	473-1799

(*Two-year board terms began October 1981)

ZERO BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., Colorado Springs, Colorado. Permission is given to reprint articles or excerpts provided credit is given. Deadline for submission of articles is the 21st of the month. Classifieds accepted anytime.

The Pikes Peak Radio Amateur Association meets on the second Wednesday of every month at the First United Methodist Church, 420 N. Nevada, at 7:30 p.m. All amateurs and interested parties are invited to attend.

Editor: Don Lohse KBØKQ, 1410 E. LaSalle, Colorado Springs, CO 80907 635-7469

JUNE MEETING MINUTES

The June meeting of the Pikes Peak Radio Amateur Association was called to order at 7:40 PM, June 9, by Vice President Karl White, K4DQ.

After introductions were made by the members and guests present, Karl made an announcement concerning the club picnic. It will be held at the Black Forest Recreation Area, the same site as last year in mid-September. Look for more information concerning this event and bring the family to a fun afternoon.

Committee reports followed with Treasurer Doug, WBØMHP, showing just in excess of \$2000 on the books. The RFI committee reported no new cases of interference investigated. The past year has been relatively quiet "RFI-wise" for which we can be thankful.

The Field Day committee gave a thorough report of preparations for this event, which was held off the Rampart Range Road (same as last year) on Saturday, June 26th through noon on Sunday the 27th. Everyone was asked to spread the word to those who would be interested in operating a station (even for a short while) or visiting the site. Four transmitters used NØST's call for this yearly event: Carl Sorten ran the novice station; Tom Weatherly was in charge of HF phone; Mike Stansberry made strange beeping noises on the HF bands; and Greg Utterback managed the VHF station.

Following a break, the drawings were held for the door prizes. An announcement was then made concerning the Olympic Committee's torch lighting ceremony to start on top of Pikes Peak on July 3 and the need for communications between the Peak and OTC where the ceremonies will conclude. Ken WØTGL handled arrangements for this event as well as assumed responsibilities for interfacing with the Olympic Committee. This job has been very ably handled in the past by Frank WBØPAJ, and we thank him for a job well done.

The program for June, on severe weather, was postponed until next spring. There being no further business, the meeting was adjourned to informal session at 8:45 PM.

Respectfully Submitted,
Greg KAØFOZ

MEETING NOTICE

The July meeting of the Pikes Peak Radio Amateur Association will be held on July 14 at 7:30 p.m. at the First United Methodist Church located at the corner of Nevada and Boulder streets. The program will be given by Ken Morley of HP and will deal with everything you ever wanted to know about components and their applications, but were afraid to ask. Members and interested persons are invited to attend.

FOR SALE: Heathkit HW 202 10 Watt 2 Meter TRANSCEIVER plus GLB Model 400B Channelizer. Full 144-148 MC coverage in 10KC or 5 KC steps. Set-up with TT Pad included. \$100.00. Bill Lange — W1THA, 471-2234

Typesetting courtesy Letter Setters

If it's CW, it's communications.

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BOARD MINUTES

The board meeting of the Pikes Peak Radio Amateur Association was called to order June 14, 1982 at 7:35 p.m. Present were Les KC0NC, Greg KA0FOZ, Karl K4DQ, Doug WB0MHP, Bud N0DDF, and Mark KA0JXW.

Field Day preparation was the first item of discussion. At a previous meeting, Jake N0CYR, indicated he would handle the breakfast Sunday morning. The board will reimburse him for money spent on food. Greg moved, Bud seconded, approval of payment for a trailer to haul the port-pottle. The motion passed unanimously. Mark reported that various media sources have been contacted concerning Field Day activities.

Discussion of the Cablevision Task Force was held. Their minutes indicated public hearings will be scheduled in the future. Consideration was given to the possibility of making a public presentation of amateur radio concerns.

Also discussed were possible ways to make the public aware of club and ham activities.

Bud reported that the CCARC wants to go to a schedule of three meetings per year and asked for approval to vote yes. Permission was granted.

There being no further business, the meeting was adjourned at 8:35 p.m.

Respectfully submitted,
Mark KA0JXW

FOR SALE: Swan 400 with AC/DC power supply and mobile VFO. Recent factory reconditioned. \$200. Regency HR 212 2M transceiver \$40. Dave N0DV 473-0293.

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SWAPFEST

The Rocky Mountain Rendezvous Swapfest sponsored by the Mountain Amateur Radio Club will be held on July 17 & 18. Location is the Red Rocks campground 3 miles north of Woodland Park on Highway 67. Selling spot is \$3.00 for 1 or 2 days. Buyers are free. Come prepared for summer mountain weather. Camping is encouraged. Spaces on first-come basis. Water and latrines are available. For further information contact N0BXI Tony Kovacevic 687-3954 or N0CMD Joe Tafoya 687-3641.

ADVERTISING NOTICE

Zero Beat will gladly run any classified ad submitted to it. However, classifieds will run for **one** month only, unless the advertiser notifies Zero Beat to continue the ad. If more than one item is listed, please keep us informed as to what sold, so that the ads are accurate. Commercial advertisers are welcome to change or update their ads whenever necessary. The ads in Zero Beat are useful to our readers, let's keep them up to date and accurate.



Zero Beat editor without
your help.

FROM THE EDITOR

As you may notice, this issue of Zero Beat is a might sparse in content. Until now, there has been enough information gotten from many sources (including articles submitted by members for which I am most grateful), other newsletters, QST, and so forth to make up a good newsletter. Fellow PPRAA members, the well is dry.

I received only one article this month (Thanks Karl) and so have almost nothing to print. No one is more concerned about this than I, but Zero Beat is more than a one man job. There is no room for complaints about what is in (or not in) Zero Beat, because it reflects what the membership wants it to be. I have been editor for about 32 issues of Zero Beat, and in that time, I can honestly say that only once or twice did I have more material than would fit. Almost always I have to scrape, borrow and beg articles, add art or something else to take up the empty holes.

I do not enjoy doing this every month, it makes production a giant pain. We have worked hard to make Zero Beat attractive and informative, but now it seems only the attractive is appropriate. It's always easier to figure that someone else will do the job, well, someone else isn't doing the job, and it is not getting done.

If we do not improve things in the future, then a change is coming. I do not feel that our content now is worth typesetting and laying out each month. Maybe it is time to go back to 1 page of typewritten paper — I think I might be able to fill that much.

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Another thing that needs to be mentioned is time. A deadline means just that — articles must be in by no later than 16 days before the monthly meeting. If they aren't in by then, it causes problems that culminate in a late night of putting together Zero Beat. Getting an article 1 or 2 days before we have to go to press is not exactly timely. You may have noticed that Zero Beat is getting out a little later than it was a year ago. This is caused by late articles (or extended scrounging for articles.)

If all this sounds kind of sudden, it isn't. I have gotten up at meetings, both club and board to make these same comments, and to ask for your help. The response has not been overwhelming.

The point of all this is to get across to you the member the problems associated with Zero Beat. So I will play that old tune one more time — Zero Beat is looking for articles. They don't have to be professionally written or stupendously exciting. Articles on how to, computers, good DX, equipment reviews, the good old days, public service, you name it, anything that might be of interest. Sit down right now, not tomorrow or this weekend and write something. If you get newsletters from other places or organizations, look for good articles that we can use, copy them (including the source so we can give credit to them) and send them to me, my address is in every issue. Let's put a little "I'll do it" back in our club instead of "You do it".

Don K8ØKQ

NOTE: Articles concerning technical information are printed in Zero Beat for the consideration of readers. Zero Beat does not vouch for the accuracy of data or applications of that data.

FOR SALE: SBE 34 (80-15 SSB), SBE SB2-LA Linear Amplifier, Swan Cygnet 300B, Knight T-60 (AM & CW transmitter 80-6), Clegg 22'er (AM only), Heath SB 61c Monitor Scope, 2 muffin fans, 45 year collection of QST 1/1935-12/1979, CQ Magazines back to 1945. All rigs in excellent condition. Rose Ebel KAØEMV, 599-8842.

MILEY'S RADIO

Jess KOTAA 719 W. 7th St. Florence, Colorado 784-3040

Prices on new equipment listed includes shipping to your door. (If you pick up—deduct shipping).

NEW EQUIPMENT IN STOCK

Am 730 HF \$695.
 Kenwood TS 830S \$850.
 Kenwood 130S \$650.
 New Icom 740 \$999.
 Kenwood TR-7850 40W \$375.
 Kenwood TR-7730 mini 25W w/TTM 299.
 New Santeo 144 2 M HT \$299.
 Icom 2AT HT Reg. \$269 Now \$239.
 Icom 2A Reg. \$239 Now \$219.
 Extra Icom batteries, chrgs. & etc. in stock.
 Azden PCS 3000 w/ TT pad \$285.
 Azden PCS 2800 10M FM \$269.
 KDK 2025 25W w/ TT mic \$259.
 New KDK 2030 mini 25W w/TTM \$279.
 New Azden PCS 300 HT \$288.
 Regency K100 10 channel programmable scanner.
 Reg. \$269 Sale \$169 while they last.
 AEA MT-1 Code Trainer \$90.
 Kantronics Field Day 2 Code Reader Demo, new warranty
 List \$460, Sale \$295.

USED EQUIPMENT

Yaesu FT 227R synth. 2 meter w/mem. \$250.
 Icom 22-5 w/TT mic \$140 w/o TT mic \$120.
 Kenwood 7800 2 meter FM XCVR \$250.
 Wilson MK 4 6 ch HT, wall chrg, 1 extra battery, TT pad \$125.
 (2) Wilson 140S SM HT w/ desk charger \$125.
 Swan FM 2X w/ AC supply, local xtals, 12 channel \$110.
 Heath HW 202 \$75.
 Genave GTX 2 12 ch. 2 meter FM, local xtals \$90.
 KDK 2016A w/UP 800 CES Microprogrammer & CES TT mic \$225.
 Swan 250 6 meter XCVR, nice shape \$179.
 Hallicrafter SR 46 and SR 42A w/HA 26 VFO. Operates both 6
 and 2 meter. All 3 for \$100.
 Heath SB 104 80-10 m solid state 100w XCVR. Digital, NB, CW
 filter \$400.

Collins 7553B Rcvr. \$450.
 Collins 3251 Trans. \$250.
 Collins 516 F2 power supply \$135.
 Transceives as a pair—all 3 for \$700—mint condition.
 Drake R4A, T4X, M5-4 p/s & spkr. Transceives as pair & ETEK
 FR-4 digital readout & counter. All cables, extra set
 of all tubes including finals. All for \$575.
 7 xtra crystals with R4A
 R4A separate \$225.
 T4X separate \$225.
 M54 power supply & speaker
 FR4 Digital Readout \$150.
 Hallicrafters SR 150 80-10 M trans. CW-SSB w/matching
 power supply & speaker. New finals & driver \$225.
 Yaesu YO 101 Monitorscope \$150.
 Heathkit HD 15 phone patch \$25.
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 Galaxy V 80-10 m XCVR w/ console, p.s. & spkr., 5WV meter
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ANTENNAS

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With the coming weather season, estimating winds around thunderstorms is an important task. The Beaufort Wind Scale is helpful in this, and might be worth tearing out and putting in your purse or wallet.

BEAUFORT WIND SCALE

BEAUFORT NUMBER	VELOCITY in MPH	DESCRIPTION	SPECIFICATION
0	0—1	CALM	SMOKE RISES VERTICALLY
1	1—3	LIGHT AIR	WIND DIRECTION SHOWN BY SMOKE DRIFT
2	4—7	LIGHT BREEZE	WIND FELT ON FACE, LEAVES RUSTLE
3	8—12	GENTLE BREEZE	LEAVES AND TWIGS IN CONSTANT MOTION WIND EXTENDS A LIGHT FLAG
4	13—18	MOD. BREEZE	DUST AND LOOSE PAPER ALSO SMALL BRANCHES MOVE
5	19—24	FRESH BREEZE	SMALL TREES IN LEAF BEGIN TO SWAY
6	25—31	STRONG BREEZE	LARGE BRANCHES IN MOTION
7	32—38	MODERATE GALE	TWIGS BREAK OFF TREES, PROGRESS GENERALLY IMPEDED
8	39—46	FRESH GALE	SLIGHT STRUCTURAL DAMAGE OCCURS
9	47—54	STRONG GALE	SLIGHT STRUCTURAL DAMAGE OCCURS
10	55—63	WHOLE GALE	TREES UPROOTED, CONSIDERABLE STRUCTURAL DAMAGE
11	64—72	STORM	WIDESPREAD DAMAGE, TRAVEL VERY DANGEROUS, LARGE TRUCKS AND CARS
12	73—UP	HURRICANE	OVERTURNED, DISASTER AREA DEFINED

This scale was made for straight wind readings. Gusts of wind readings falling to straight winds can be read fairly accurately by combining sets of above.